

**Title 08**  
**Maryland Department of Natural Resources**  
**Subtitle 02 - Tidewater Administration**

**Chapter 14 - Aquaculture**

Authority: Natural Resources Article, §4-11A-02, Annotated Code of Maryland

**.01 Scope.**

This chapter applies to the collection, permitting, possession, production, processing, marking, transporting, purchase, or sale of fish or aquatic plants which are the products of, or intended to be used for, aquaculture as that term is defined in the Natural Resources Article, §4-11A-01, Annotated Code of Maryland.

**.02 Purpose.**

The purpose of this chapter is to encourage the orderly development of an aquaculture industry in Maryland, while ensuring that aquaculture operations do not adversely impact upon the State's wild stocks of fish.

**.03 Definition.**

A. The following terms have the meanings indicated. Terms not defined below shall have the meaning given to them in relevant statutes, or, if not defined in statutes, the meaning attributed in common use. The terms "fish" and "person" are defined in Natural Resources Article §4-101, Annotated Code of Maryland. The definitions of these terms are provided below for convenience, but persons affected by the Department's regulations should be aware that this definition is subject to amendment by the General Assembly.

B. Terms Defined

(1) "Aquaculture" means the commercial rearing of the species of fish or aquatic plants listed in Regulation .07, or as otherwise permitted by these regulations. It includes one or more activities which are related to the production of fish or aquatic plants.

(2) "Aquaculture activities" means those activities which may include the purchase, sale, possession, capture, production, breeding, transportation, and processing of fish or aquatic plants.

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B. On an application form provided by the Department, a person who wishes to engage in aquaculture or aquaculture activities in Maryland (referred to as "applicant") shall provide the:

- (1) Name and address of the applicant,
- (2) Type and location of the facility or proposed facility, if any;
- (3) Species of fish or aquatic plant for which a permit is sought;
- (4) Type of water supply and location of nearest body of water that has an inlet or outlet water flow;
- (5) Type of aquaculture activity or activities proposed; and
- (6) Estimate of production capacity.

C. As part of the application process, the applicant shall:

(1) Furnish information the Department requires concerning the proposed source of any stock of fish to be used in the proposed aquaculture activity. If unknown at time of application, a permit may require that the Department be notified in advance of receipt of any shipment of fish.

(2) Furnish information concerning the health status of any proposed stock of fish, including certifications acceptable to the Department. If unknown at the time of application, a permit shall require the certification before shipment or receipt of any shipment of fish.

(3) Furnish any other information concerning the proposed activities necessary to complete the application.

(4) Allow the Department to inspect at reasonable hours the site of any proposed aquaculture facility.

#### **.07 Permitted Species.**

A. The Department may issue permits for the following species or families of fish and aquatic plants:

(1) Fish

<i>Common Name</i>	<i>Scientific Name</i>
(a) American Eel	Anguilla rostrata
(b) American Shad	Alosa sapidissima
(c.)Rainbow Trout	Oncorhynchus mykiss
(d) Brown Trout	Salmo trutta
(e) Brook Trout	Salvelinus fontinalis

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(c.)Maintain shipping and receiving records by species of the distribution of fish or aquatic plants to or from a permitted facility;

(d) Notify the Department immediately upon the discovery of any disease affecting the fish or plants at the facility that has the potential to contaminate native or naturalized species of fish.

B. The records required by §A(3) shall be maintained at the facility; or at a specified location other than the facility for 3 years, and be made available to the Department for inspection upon request.

#### **.09 Approval of Permits.**

A. The Department may issue a permit to engage in aquaculture activities authorized by law and these regulations, after receipt and approval of a completed application.

B. Permits issued by the Department shall be:

(1) Valid for a 5-year period, and expire on December 31 of the fifth year after issuance;

(2) Issued for each facility separately.

C. Permits issued by the Department are not transferrable.

D. Permits may be modified or amended upon request of the permittee, or at the discretion of the Department.

E. The Department may deny a permit application to possess species of fish or aquatic plants which may have an adverse impact on fish populations or their ecosystems.

## **.10 Special Requirements.**

A. Native or Naturalized Species. Facilities which produce native or naturalized fish species listed in Regulation .07 shall confine production to the permitted location.

B. Non-native Species.

(1) A person may not conduct aquaculture activities using non-native fish except in approved nontidal ponds, lakes, and impoundments.

(2) Facilities approved for non-native or hybrid finfish in nontidal ponds, lakes, and impoundments shall be constructed to assure that non-native stocks are precluded from entering the tidal waters of the State. A facility may not discharge its effluent directly or indirectly into Maryland waters without approved treatment.

C. Acquisition of Adult Finfish, Fingerlings, Fry, and Eggs.

(1) Brood stock, or the progeny of native or naturalized species of finfish, may be obtained from an out-of-State registered fish dealer. They shall be certified by an authority acceptable to the Department to be free of known, infectious diseases that have the potential to contaminate native or naturalized species of fish.

(2) Out-of-State suppliers shall be registered with the Department before doing business in Maryland.

(3) The Department may provide technical assistance, upon request, to determine whether the fish have any known viral, bacterial, protozoan, or parasite infections which have the potential to contaminate finfish populations of the State.

(4) Each purchase or acquisition of finfish for aquaculture purposed shall be accompanied by a receipt, or other written evidence showing the date, source, species, quantity of the acquisition, and its destination. Receipts shall be retained as part of the permittee's records for 3 years.

(5) Imported hybrid or non-native finfish shall be certified by an authority acceptable to the Department to be free of known, infectious diseases that have the potential to contaminate native or naturalized fish or aquatic plants.

D. Size requirements. After January 1, 1990, there is no minimum size requirement for any species of finfish propagated from aquaculture nontidal ponds, lakes, and impoundments, provided the production of finfish from permitted facilities is identified as an aquaculture product.

## **Biosecurity and Disease Prevention in Aquaculture Facilities and Fish Stocks**

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### **Preface:**

This information is being provided as a service to the Aquaculture Industry. This information is to be used to help prevent disease outbreaks in aquaculture facilities which could result in destruction of infected fish stocks. These recommendations are intended to meet this purpose. No one, especially personnel of the Maryland Department of Agriculture, Animal Health Section, wants to order the destruction of any finfish or shellfish stock when a serious, contagious and infectious disease is found.

For the purpose of this information, “fish” includes finfish and shellfish. It is hoped that the information provided will be put to good use. This information has been developed by the Maryland Department of Agriculture.

The objectives of this publication are:

1. Develop and understanding of the importance of maintaining a biosecurity policy within aquaculture facilities.
2. Gain a general understanding on potential routes of disease agent introduction.
3. Obtain basic knowledge on practices used to effectively minimize the possibility of becoming a vehicle spreading the disease.
4. Become aware of general methods necessary for aquaculture operators to maintain reasonable biosecurity around the facility.
5. Become familiar with the general techniques, equipment and procedures used for cleaning, washing, and disinfecting.

### **I. Introduction:**

Owning and operating an aquaculture facility requires a practical knowledge of the fish, their habits, shelter and nutritional requirements and a practical acquaintance with diseases, their prevention and biosecurity.

Biosecurity means minimizing the risk of introducing disease causing organisms into your stocks and facility. In other words, it is informed common sense. Plan, engineer and operate your facilities to prevent situations which may expose your stock to disease or increase stress on them. DO NOT bring disease to your fish and DO NOT bring your fish to disease. REMEMBER biosecurity expenditures should not be viewed as unnecessary costs, but rather as short and long term investments in healthy fish and a profitable and enjoyable future for you and your operation. DISEASE PREVENTION DOES NOT COST; IT PAYS.

A sound management and sanitation program will greatly reduce the risk of introducing an unwanted microbe (germ) into your fish stock. Microbes travel from place to place in tanks, water, vehicles, equipment, people, clothing, pets, rodents and fish. Many microbes die in 2 to 3

days while others persist for months or even years. With more lethal diseases, in-depth surveillance, strict quarantine and rapid destruction of all infected stocks remain the only effective methods of halting the spread of the disease.

Some microbes cause little or no harm to certain species of fish but may be very deadly to other species. Fish can also be disease carriers without actually “showing” the disease. Stress and poor sanitation can cause carrier fish to shed microbes to other fish or become diseased themselves.

Do not rely on rumors and half-truths. Become educated and informed; attend Aquatic Animal Health meetings. Find out information on your state’s Aquatic Animal Health Policy and what you can expect to happen if a serious disease is diagnosed in your area. Contact your State Department of Agriculture.

## **II. Reasons for Developing and Utilizing a Biosecurity Plan:**

- Because of the infectious nature of virus and bacteria, cross contamination of an entire aquaculture facility could occur from one ounce of contaminated water.
- You make your living in one way or another from the aquaculture industry and any introduction of a serious disease means disruption of the production cycle and loss of revenue.
- A disease outbreak in the industry has the potential to adversely affect everyone involved including producers, growers, buyers and consumers.

## **III. Do’s in General:**

- Try to maintain a high degree of natural disease resistance in your fish stocks.
- Avoid exposing fish to stressful conditions such as overstocking and improper handling techniques which may reduce their ability to fight off the disease.
- Maintain healthy and stable water quality system.
- Use high quality feeds which when fed will be consumed efficiently and will not degrade water quality.
- Fully train all facility personnel in you biosecurity practices.
- Practice effective daily sanitation procedures on handling equipment and facilities when warranted.
- Wear easy to pull on rubber boots that are worn only inside the growing facility and disinfected regularly.
- Control and closely monitor the movement of all fish and equipment entering or leaving your facility.
- Purchase your fish from reliable sources that maintain good health management records.
- Quarantine all newly arrived fish approximately 30 days for observation. This means using isolated holding tanks which are fed and handled last, and then disinfecting shoes, hands, nets, etc.
- Restrict visitors in or near the aquaculture facility. Provide and require disinfectant foot baths and hand washing stations at the entrance to the facility.
- REMEMBER that YOU must accept the responsibility of reducing the risk of disease introduction into your facility through good record keeping and sound BIOSECURITY practices.

## **IV. Don’ts in General:**

- Do not compromise the biosecurity of your facility by engaging in unsafe and unhealthy management practices.

--Do not use equipment that has been used to transport stock between facilities or imported from an outside source unless it has been disinfected.

--Do not enter your own facility after visiting another operation until you have changed your clothing and completely disinfected shoes, hands and other exposed skin.

--Do not introduce fish into your facility that do not have a Certificate of Veterinary Inspection stating that they are free from signs of specific disease pathogens.

REMEMBER that an ounce of prevention is worth a pound of cure. You are the first line of defense in preventing a disease outbreak within your facility.

#### **V. When Unusual Behavior and Increased Mortality is Observed:**

--Respond to the problem immediately.

--Make note of any symptoms, irregularities, equipment failures or changes in management activities that preceded that change in health status.

--Have your State Animal Health Laboratory necropsy and examine dead and/or dying specimens.

--Have post-mortems done on dead fish to effectively determine that cause of death.

--Medicate only after proper diagnosis has been made and follow treatment instructions completely.

--Properly dispose of diseased carcasses that have been removed from the system.

#### **VI. Easy to Follow and Inexpensive Tips Aquaculture Operators Can Use to Keep Their Facilities Safe:**

--EDUCATE YOURSELF. Do not rely on uninformed opinions and rumors. Learn how various diseases are spread and what actions may put your operation at risk.

--Know the status of visitors to your operation. Ask them questions about where they have been before arriving at your facility.

--Provide visitors with sanitized boots to wear and have them wash their hands before entering the facility.

--Get detailed information concerning the health status of any facility you plan on visiting, delivering to and/or purchasing from.

--Wash and disinfect any equipment, including vehicles that have been used outside your facility.

REMEMBER that in order to effectively disinfect your facility you must first remove (clean) all organic material down to an impervious surface so that the disinfectant can come directly in contact with the bacteria or virus.

To effectively disinfect the facility, follow these steps.

##### **FIRST CLEAN:**

1. Remove all equipment and material in the facility including feeds furniture, pets, etc.
2. Sweep out all loose dirt, cobwebs, etc.
3. Scrub all surfaces with a detergent/disinfectant solution.
4. Rinse all detergent and organic matter from surfaces with steam or high pressure washer.

##### **NEXT SANITIZE:**

5. Read the label.
6. Apply the disinfectant.
7. Allow the disinfectant to dry completely.

8. Reapply the disinfectant and allow it to dry a second time, if necessary.
9. Return equipment, etc. after it has been disinfected and rinsed thoroughly.

## **VII. Choosing a Disinfectant:**

Select the proper disinfectant for the job you want to do. Get advice from your local veterinarian, State Department of Agriculture, Extension Agent or Agricultural Supply salesperson. When choosing a disinfectant, consider the characteristics listed below. The relative importance of these characteristics will depend on your individual situation, but keep in mind that efficacy, toxicity and residual activity are important concerns.

\*Cost

\*Efficacy (killing efficiency against bacteria, virus and fungi).

\*Activity with organic matter.

\*Toxicity (relative safety to animals)

\*Residual Activity.

\*Effect on fabric and metals.

\*Activity with soap.

\*Solubility (acidity, alkalinity, pH).

\*Contact time.

\*Temperature.

Disinfectants can be divided into classes based on their chemical composition and some commonly used types are:

**HYPOCHLORITES (Chlorine):** Chlorine compounds are good disinfectants on clean surfaces but they do not work well on dirty surfaces. Chlorine is effective against bacteria and many viruses. These compounds are much more active in warm water than in cold water. Chlorine solutions are somewhat irritating to skin and are corrosive to metals. They are relatively inexpensive. Examples of the hypochlorite class are Clorox, Chloramine-T and Halazone.

**QUATERNARY AMMONIUM:** These compounds are generally odorless, colorless, non-irritating and deodorizing. They also have some detergent action, and they are good disinfectants. However, they are inactive in the presence of some soap or soap residues. Their antibacterial activity is reduced in the presence of organic material. Quaternary ammonium compounds are effective against bacteria and somewhat effective against fungi and viruses. Examples of the quaternary ammonium class are: Roccal, Germex, Hi-Lethol, San-O-Fec, Warden and Zephiran.

**IDOPHORS:** Iodine compounds are available as iodophors, which are combinations of elemental iodine and a substance that makes the iodine soluble in water. They are good disinfectants, but they do not work well in the presence of organic material-that is, on dirty surfaces. Iodophors are effective against bacteria, fungi and many viruses. Iodine is the least toxic of the disinfectants noted here, but it can stain clothing and some surfaces. Examples of the iodophor class are Betadine, Iofec, Isodyne, Losan, Tamed Iodine and Weladol.

## **APPENDIX A**

### **Pathogen Classification Scheme:**

The scheme is based on the nature of the pathogen, available literature on distribution and known effects on wild and cultured stocks, and existing distribution within the waters of the State of Maryland. Specific points used in developing this scheme were:

1. Known pathogenicity and virulence of the organism in question.
2. Species susceptibility.
3. Source of fish or fish products.
4. Geographical consideration both intercontinental and continental.
5. Availability of grey and peer reviewed literature on source region or species to be imported.

The scheme also takes into consideration the following:

1. That immunological and genetic naivety to a specific pathogen constitutes reason for avoidance.
2. That the Continental Divide of North American constitutes a significant barrier dividing the United States into two geographical zones.
3. That specific countries or watersheds within countries possess unique pathogens that could pose significant threats to wild and cultured stocks of fish.
4. That in most instances the source country has little or no information on the pathogens present in wild stocks.

The scheme is as follows:

### **Priority One -- Absolute Avoidance:**

1. Mandatory screening of individual lots.
2. Detection in fish screened constitutes cause for denial of acceptance.
3. If special methods required, they must be applied for specific pathogens.
4. When detected, must be reported to Maryland officials.

### **Priority Two -- Avoidance Desired, Achieved via Risk Minimization:**

1. Mandatory screening of individual lots.
2. Detection in fish screened constitutes cause for denial of acceptance if
  - a. clinical signs are associated with the detection, and
  - b. detection rate exceeds either 10% of all individuals examined or 50% of known infection rate in wild or cultured stocks of the destination waters.
3. Special methods not required.
4. When detected, must be reported to Maryland officials.

### **Priority Three -- Avoidance Desired, But Not Mandatory:**

1. Mandatory screening of individual lots.
2. Detection in fish screened does not constitute cause for denial of acceptance, however, transport of fish showing clinical signs is discouraged.
3. Special methods not required.
4. When detected, must be reported to Maryland officials.

**Priority Four -- Special Cases:**

1. Mandatory screening of individual lots when:
  - a. the pathogen is present in a region and is known to threaten wild or cultured stocks, or
  - b. information on the disease and associated causes is unavailable from the country or region serving as the source.
2. Detection of the pathogen in fish screened may constitute cause for denial of acceptance or require special holding conditions.
3. If special methods are required, they must be applied for the specific pathogen.
4. When detected, must be reported to Maryland officials.

All other pathogens not on this list are nonreportable to Maryland officials, however, it is desirable that they be part of the record that is available to the consumer. Fish showing clinical signs of any disease or parasite should be avoided. Importation of diseased fish can have a direct negative impact on the reputation of a facility, and future marketing by the exporting facility. Pathogens will be added or deleted as circumstances and knowledge warrant.

### Classification of Known Pathogens for the State of Maryland:

FINEFISH PATHOGENS	PRIORITY
<i>Aeromonas salmonicida</i> - Furunculosis	II
Carp Pox Virus	I
<i>Ceratomyxa shasta</i>	I
Channel Catfish Virus	I
<i>Edwardsiella ictaluri</i>	I
<i>Edwardsiella tarda</i>	I
<i>Yersinia ruckerii</i> - Enteric Redmouth Disease	III
Infectious Hemopoietic Necrosis Virus	I
Infectious Pancreatic Necrosis Virus	III
<i>Mycobacterium fortuitum</i>	II
<i>Mycobacterium marinum</i>	II
<i>Myxobolus cerebralis</i> - Whirling disease	II
Myxozoan agent - Proliferative Kidney Disease	IV
<i>Onchorhynchus masou</i> Virus	IV
<i>Renibacterium salmoninarum</i>	II
Rhabdovirus Disease of Northern Pike Fry	IV
<i>Streptococcus</i> species	II
<i>Vibrio salmonicida</i>	I
Viral Hemorrhagic Septicemia Virus	I

SHELLFISH PATHOGENS	PRIORITY
<i>HAPLOSPORIDIUM NELSONI</i> (MSX)	IV
<i>Haplosporidium</i> species	IV
Juvenile Oyster Disease Organism	IV
<i>Minchinia</i> species	IV
<i>Nocardia</i>	III
Oyster herpesvirus	IV
Oyster iridovirus	IV
<i>Perkinsus marinus</i> (Dermo)	IV

CRUSTACEAN PATHOGENS	PRIORITY
<i>Baculovirus penaei</i>	I
<i>Baculovirus</i> species	I
Infectious Haematopoietic Necrosis Virus	I
Infectious Hypodermal Necrosis Virus	I
White Spot Disease	II
Yellowhead Disease	II

FUNGAL DISEASES	PRIORITY
<i>Aphanomyces</i> species	III
<i>Ichthyothonus</i> species	II
<i>Trichomaris</i> species	II

PARASITES	PRIORITY
<i>Proteocephalus ambloplitis</i> (Bass Tapeworm)	I
<i>Anguillicola</i> species	IV

## APPENDIX B

### OIE -- OFFICE INTERNATIONAL DES EPIZOOTIES

The Office International des Epizooties (OIE) in Paris, France, was created in 1924 as the world organization for animal health. Today, there are 147 Member Countries. The goal of the OIE is to promote awareness of disease problems associated with trade in live animals and animal products, and of the means for their control and prevention.

#### Structure of the OIE:

The Chief Veterinary Officer in each Member Country serves as (or appoints) a Delegate to the International Committee which meets annually in General Session at the OIE Headquarters in Paris. The Delegates for the United States is Dr. Joan Arnoldi, USDA/APHIS, and the Delegate for Canada is Dr. Norman Willis, Canadian Food Inspection Agency. The Delegates elect a President and members of the Administrative, Regional and Specialist Commission for periods of three years. The International Committee reviews the budget, supervises management, and rules on questions relating to the mission and operations of the OIE. Decisions take the form of resolutions that are voted upon in the General Session. Areas covered include: scientific and technical orientation of the OIE, recommendations to Member Countries on control of animal diseases, creation of Working Groups or Commissions to advise the OIE, and signing of agreements with other International Organizations.

#### Specialist Commissions:

Specialist Commissions are composed of a small number of experts, elected by the International Committee, to provide technical advise on the epidemiology, detection and control of animal diseases and to make recommendations on international regulations. Currently, the Specialist Commission concerned with aquatic animals are:

*The Standards Commission* which establishes standards for diagnostic methods and for testing biological products, such as vaccines.

*The Fish Diseases Commission* performs the roles of the Code and Standards Commissions (recommendations for the import and export) for aquatic animals and aquatic animal products.

**Working Groups:**

Four Working Groups have been established to address specific needs of the OIE. Currently these are: Biotechnology, Informatics and Epidemiology, Veterinary Drug Registration, and Wildlife diseases.

**Fish Diseases Commission:**

In 1960, the OIE established a three-member Specialist Commission to deal specifically with the increase in international trade as aquaculture expanded world-wide. In 1988, the Fish Diseases Commission was enlarged to five members and asked to include diseases and pathogens of molluscs and crustaceans. International experts are asked to assist the Fish Diseases Commission, either by attending meetings as invited specialists in fish, mollusc and crustacean pathology or by providing Reference Laboratory services to diagnostic facilities in Member Countries.

**OIE Approach to Health Control in Aquatic Animals:**

The OIE approach to animal control in aquaculture involves recommendations to Member Countries to apply the following measures as outlined in the International Aquatic Animal Health Code:

1. Assessment of the health status of aquatic animals in a production site, geographical area, or entire country based upon sampling procedures and laboratory examinations conducted in accordance with the OIE International Aquatic Animal Health Code and Diagnostic Manual for Aquatic Animal Diseases.
2. Establishment of specific pathogen-free aquaculture establishments/zones/countries and a requirement to stock open waters and facilities only with products having a health status higher than or equal to that of the aquaculture establishments/zones/countries concerned.
3. Eradication of disease when possible by slaughtering infected stock, disinfection and restocking with pathogen free animals.
4. Notification by each Member Country of its requirements, in addition to those provided by the Code, for the importation of aquatic animals and products thereof.

If the above procedures are used, it is possible to define the health status of aquaculture products for specified pathogens, according to the country, zone or production site of origin. The health status of the product can thus be warranted by the issuance of an official health certificate, stating that the aquaculture products in a defined consignment originate from a country, zone, or farm/harvesting site free of specified diseases.

Both the International Aquatic Animal Health Code and Diagnostic Manual for Aquatic Animal Diseases are updated regularly. Member Countries may propose changes through their Chief Veterinary Officers who communicate directly with OIE. The proposed changes are examined by the Fish Diseases Commission and draft recommendations are prepared for consideration by Member Countries at the annual General Session.

Information on fish, mollusc and crustacean pathogens and diseases forms part of the annual report of the Fish Disease Commission. Data are presented on the epidemiological features relevant to viruses, bacteria and/or parasites listed, as well as those not listed in the Code; the efficacy, failures or improvements of control methods and policies, in addition to research developments. Modifications and evolution of diagnostic methods are also described.

## **OIE INTERNATIONAL AQUATIC ANIMALS HEALTH CODE LISTED PATHOGENS AND DISEASES**

Pathogens are included in the International Aquatic Animal Health Code according to considerations of: geographic range, response to therapy and socio-economic importance.

### **NOTIFIABLE DISEASES:**

#### **Finfish**

Viral hemorrhagic septicemia  
Epizootic hematopoietic necrosis  
Infectious hematopoietic necrosis  
Oncorhynchus masou virus disease  
Spring viremia of carp  
Gyrodactylosis of Atlantic salmon

#### **Mollusc**

Bonamiosis  
Haplosporidiosis  
Marteiliosis  
Mikrocytosis  
Perkinsosis

### **OTHER SIGNIFICANT DISEASES:**

#### **Finfish**

Channel catfish virus disease  
Viral encephalopathy  
Viral retinopathy  
Infectious pancreatic necrosis  
Infectious salmon anemia  
Epizootic ulcerative syndrome  
Bacterial kidney disease  
Enteric septicemia of catfish  
Piscirickettsiosis

#### **Mollusc**

Oyster velar disease

#### **Crustaceans**

Baculoviral midgut gland necrosis  
Nuclear polyhedrosis baculovirosis  
Infectious hypodermal necrosis  
Infectious haematopoietic necrosis  
Yellowhead disease  
Crayfish plague  
White spot disease

## **APPENDIX C HATCHERY CERTIFICATION**

Hatcheries that supply seed, fry and/or fingerlings need a mechanism to meet specific pathogen free status without individual lot inspections. A large number of hatcheries in the united states and some foreign countries have an aquatic animal health testing history with annual pathogen testing. This annual testing and history should enable the hatchery to provide their product to Maryland aquafarmers and private pond owners without lot inspections, provided testing has been and is for Priority One and Two pathogens.

The mechanism to meet this specific pathogen free status will be divided into two (2) Classes of Certification. The Class of Certification for each hatchery will be determined by the Aquatic Animal Health Board through examination of testing and/or inspection records of the hatchery. The certification requirements for each Class of Certification are as follows:

### **Class A Certification:**

1. Five (5) years of the appropriate Priority One, Two, and Three pathogen free status. Testing records will be provided for review by the AAH Board.
2. Annual testing for the appropriate pathogens will occur with results furnished to the AAH Board.
3. Maintain all testing records and health certificates of broodstock additions for five (5) years.
4. Individual lot testing for appropriate Priority One, Two and Three pathogens will NOT be required.
5. Health certificates or statements will be provided with each shipment.

### **Class B Certification:**

1. Three (3) years of the appropriate Priority One, Two and Three pathogen free status. Testing records will be provided for review by the AAH Board.
2. Annual testing for Priority One and Two pathogens will occur and testing results provided to the AAH Board.
3. Maintain all testing records and health certificates of broodstock additions.
4. Individual lot testing will be required for Priority One and Two pathogens, but NOT for Priority Three pathogens.
5. Health certificates or statements will be required for each shipment.

NOTE: Testing for any Priority Five pathogen will be required for each lot shipped into Maryland.

A list of hatcheries certified by the Aquatic Animal Health Board will be maintained and provided upon request to Maryland aquafarmers and private pond owners.